

extended area of the keyboard becomes accessible for the user. The accessible size of display does not significantly change. In the second opened configuration, the display DPL1 is extended in relation to the body B2, but the keyboard KB2 is not so moved. Therefore, the keyboard KB2 remains, relative to the body B2, as it is in the closed configuration so that only a few keys are accessible. It is possible to change the configuration of the mobile station between the closed configuration and the second opened configuration via the first opened configuration. The mobile station is first opened to the first opened configuration and then the keyboard is pushed in a position in which it covers less of the display DPL1 so that a greater area of the display DPL1 is accessible to the user.

In the closed configuration, the user may conveniently carry and use the mobile station as a compact device with a small display and a small keyboard. In the first opened configuration, the mobile station can be used for tasks that require a more complete keyboard but not necessarily more display surface, for example in dialling a telephone number or typing a text message. In the second opened configuration, the mobile station can be used for tasks requiring an extended display.

In a variant of the above sixth embodiment, the mobile station is able to change from the closed configuration to the second opened configuration without the first opened configuration being an intermediate stage between these configurations. Starting from a closed configuration, either the display can be moved alone to reach the second opened configuration or both the display and the keyboard can be moved to reach the first opened configuration. The mechanism for moving the keyboard KB2 and the display DPL1 corresponds to any appropriate mechanisms including those explained earlier in relation to other aspects and embodiments of the invention. The mobile station has a user selectable input for recognising which of the alternative movements is to occur. This input is typically implemented by two different buttons or a dual-action button. Using a first selection the user can cause the mobile station to open from the closed configuration to the first opened configuration. Using a second selection, the user can cause the mobile station to open from the closed state automatically to the second opened configuration. This spares the user from the trouble of manually sliding the keyboard back to shift from the first opened configuration to the second opened configuration.

The keyboard KB2 comprises mechanical switches coupled to activate electronic functions of the mobile station. Alternatively, the display DPL1 is of the touch-sensitive screen type and the keyboard KB2 comprises a set of press-through keys for actuating portions of the touch-sensitive display portion behind it. This alternative implementation is advantageous, because, at a certain moment in time, either the display DPL1 or the keyboard KB2 is extended to the full length. Hence, only a small portion of the display is reserved for sensing key actuation, when the mobile station is in the second opened configuration. Yet a reasonably large keyboard is provided for use in the first opened configuration.

The sixth embodiment may be modified to provide the mobile station with at least one intermediate configuration between the first and second opened configurations in which the body B2 covers some, but not all, of the keys. In this intermediate configuration, the display DPL1 is extended as in the first and second configurations, but the keyboard KB2 is between positions shown in FIGS. 14 and 15. For example, the keyboard KB2 may be partially slid into the

body B2 so that the body covers some of the keys. Alternatively, in the first opened configuration, the keyboard may be entirely slid into the body B2 so that no keys are accessible to the user.

This paper presents the implementation and embodiments of the invention with the help of examples. A person skilled in the art will appreciate that the present invention is not restricted to details of the embodiments presented above and that the invention can also be implemented in another form without deviating from the characteristics of the invention. The presented embodiments should be regarded as illustrative but not restricting. For example, moving elements can be arranged to move in the same direction but at different speeds for forming a structure that opens and closes telescopically. Alternatively, the elements can be arranged to move at any angle with respect to each other as, e.g. perpendicularly or diagonally with respect to each other. Thus, the possibilities of implementing and using the invention are only restricted by the enclosed claims, and the various options of implementing the invention as determined by the claims, including the equivalent implementations, also belong to the scope of the invention.

What is claimed is:

1. A portable electronic device having:

a body;

a first element slideably fitted to move in relation to the body between a first position and a second position;

a user interface comprising a set of keys and a display, the display having a visible part, and the display comprising multiple lines for displaying information;

a second element slideably fitted to move in relation to the body between a third position and a fourth position that is opposed to the first and second position;

wherein the device further comprises moving means for moving one of the first element and the second element from one position to another position on moving the other element from its one position to another position;

a first configuration, in which the visible part of the display is reduced so that not all the display lines are visible; and

a second configuration, in which the visible part of the display is extended so that more display lines are visible than in the first configuration.

2. A portable electronic device according to claim 1, wherein in the first configuration, the visible part of the display is reduced by a component selected from a group consisting of: the second element, the body and the first element.

3. A portable electronic device according to claim 1, wherein the first element comprises at least a subset of the keys.

4. A portable electronic device according to claim 1, wherein in the first configuration, the first element is in the first position and the second element is in the third position; and

in the second configuration, the first element is in the second position and the second element is in the fourth position.

5. A portable electronic device according to claim 1, wherein the body has a space for accommodating part of the second element when the second element is in the third position.

6. A portable electronic device according to claim 1, wherein the device has a third configuration, in which the first element is in the second position and the second element is in the third position.